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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/567,744

02/10/2006

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25401041

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466 7590 10/09/2007  
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EXAMINER

SINGH, SUNIL K

ART UNIT

PAPER NUMBER

3732

MAIL DATE

DELIVERY MODE

10/09/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

**Application No.**

10/567,744

**Applicant(s)**

FRACCON, MAURIZIO

**Examiner**

Sunil K. Singh

**Art Unit**

3732

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 02 July 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 26-35 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 26-35 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |                                                                                                            |                                                                                         |
|------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____                                                |

## **DETAILED ACTION**

This action is in response to Applicant's amendment filed on 07/02/2007

### ***Specification***

1. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

2. The abstract of the disclosure is objected to because it exceeds 150 words in length and contains the legal phraseology "comprising" and "consisting of" in Lines 1 and 3 respectively. Correction is required. See MPEP § 608.01(b).
3. The disclosure is objected to because of the following informalities: The applicant has provided an incomplete "marked-up" copy of the specification as parts of the originally filed specification is missing (i.e. Page 1, Lines 15 – Page 2, Line 12 of the original specification is missing from the "marked-up" copy, etc.).

Appropriate correction is required.

### ***Claim Objections***

4. Claim 28 objected to because of the following informalities: Claim 28 depends from Claim 1; however, Claim 1 has been cancelled. Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 30 and 32-35 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

- Claim 30 recites the limitations “the pin” in Line 1 and “the shell” in Line 2. There are insufficient antecedent basis for these limitations in the claim.
- Claim 32 recites the limitations “said pin” in Line 1 and “the plant” in Line 2. There are insufficient antecedent basis for these limitations in the claim.
- Claim 33 recites the limitation “said pin” in Line 1. There is insufficient antecedent basis for this limitation in the claim.
- Claim 34 recites the limitation “said pin” in Line 1. There is insufficient antecedent basis for this limitation in the claim.
- Claim 35 recites the limitation “said pin” in Line 1; “said filling polymerized compound” in Line 2; and “external edges” in Lines 2-3. There are insufficient antecedent basis for these limitations in the claim.

***Claim Rejections - 35 USC § 102***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 26 and 27 are rejected under 35 U.S.C. 102(b) as being anticipated by Weissman (US 2002/0142265).

Weissman discloses a dental implant in Fig. 2 that includes: a body (18) presenting a cylindrical or conical shape having turns (20) with a rough surface; the turns ending up in a smooth and of cylindrical neck area of the body (Fig. 2); the body being made of titanium [0096]; a stump (22) joint to the body (18), the stump (22) comprising a first transmucous part cylindrical or of a truncated cone shape or of a pressed funnel shape (Fig. 2); the stump having a second part in the shape of a truncated cone (Fig. 2); the stump being made of a shapable material; and wherein the body (18) and the stump (22) of the implant constitute a single block structure (Fig. 2).

***Claim Rejections - 35 USC § 103***

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over Weissman (US 2002/0142265) in view of Ennajimi et al. (US 2005/0136378).

Weissman discloses the invention substantially as claimed except for a device wherein the stump is made of zirconium and/or compound material.

Ennajimi teaches a device wherein the stump (30,130) is made of zirconium and/or compound material (see Claims 30,50) in order to provide an implant that is made of a material that is biocompatible and allows osseointegration [0122]. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Weissman to include a stump made of zirconium, as taught by Ennajimi, in order to provide a conventional stump that is biocompatible.

11. Claims 29-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weissman (US 2002/0142265) in view of Blacklock (US 5,716,215) in further view of Reidt et al. (US 6,627,327).

Weissman discloses the invention substantially as claimed except for a device that includes: a pin disposed inside a funnel shaped shell; the pin being made of zirconium fibre and is transparent; wherein the stump presents an axis that is angled with respect to the body of the implant; wherein the pin is bent with respect to the axis of the implant; and wherein the pin is cemented with a photo polymerizable or self-polymerizing compound that projects beyond the external edges of the funnel shaped shell.

Blacklock teaches a dental plant (102) that includes: a stump (110; 128 in Fig. 5a) having a truncated cone shape inserted to the body (106) of a plant (102) forming a funnel shape shell (Figs. 1-5); a pin (126) that is bent (Fig. 5a) with respect to the axis of the implant; a stump (110) having an axis angled with respect to one of the plant (Fig. 1); a body of plant (106) and stump (110) consisting of a single piece-mono-lithe or mono-block (Figs. 1-5); a pin that project beyond the edges of the funnel-shaped walls

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to form a stump projection similar to a natural filed tooth (Figs. 1-5). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Weissman to include such an implant, as taught by Blacklock, in order to provide an angled implant that better fits a patient's dentition. Furthermore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Weissman/Blacklock by providing a pin made of transparent material and of zirconium fibre, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. See *In re Leshin*, 125 USPQ 416. However, Weissman/Blacklock fails to disclose the use of cementing the pin in the stump by means of a photo polymerizable or a self-polymerizing compound.

Reidt et al. teaches a dental prosthetic device where the support section (12) and the milling section (14) are cemented together by use of a self polymerizing compound such as epoxy (Column 7, Lines 27-36) in order provide a stronger bond between the two sections (Column 4, Lines 39-41). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Weissman/Blacklock by using a self polymerizing cement, as taught by Reidt et al., in order to strongly bond the pin with the hollow stump.

### ***Response to Arguments***

12. Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

13. Applicant's arguments filed 7/20/2007 have been fully considered but they are not persuasive. The arguments appear to address a completely different application and are therefore invalid.

***Conclusion***

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO-892 Form.

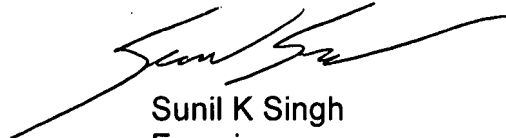
15. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sunil K. Singh whose telephone number is (571) 272-3460. The examiner can normally be reached on Monday-Friday 8:30am-5pm.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cris L. Rodriguez can be reached on (571) 272-4964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Sunil K Singh  
Examiner  
Art Unit 3732

SKS  
09/14/2007



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